

Serial No. 10/539,160
Amendments to the Claims

1-13. (Cancelled)

14. (Currently amended) Intervertebral implant for stabilizing adjacent vertebrae, comprising a solid biocompatible material implant body having a tubular general structure, the body having a longitudinal axis and a transverse axis, the body being delimited by an upper wall and a lower wall that are convex and slightly divergent toward the front, two opposite lateral walls that are plane and slightly divergent toward the front, and a posterior wall with a threaded axial hole, with a single interior cavity providing communication between orifices provided in the upper wall and the lower wall, wherein:

the body has a height, defined by a distance between the upper wall and the lower wall, wherein the height varies along the transverse axis,

the upper wall and the lower wall each comprise a respective single large upper orifice or lower orifice,

an interchangeable compression plug is adapted to be fitted by screwing it into the threaded axial hole in the posterior wall,

the interior cavity is closed toward the front by an anterior wall,

the width of the implant defined by the lateral walls is less than its height defined by the upper wall and the lower wall.

15. (Previously presented) Implant according to Claim 14, wherein, because of the upper orifice and the lower orifice, the interior cavity is open over the whole of its width between the lateral walls and over the whole of its length between the posterior wall and the anterior wall.

16. (Previously presented) Implant according to Claim 14, wherein the interchangeable compression plug comprises a conical interior end portion.

17. (Previously presented) Implant according to Claim 14, wherein the interchangeable compression plug and the threaded axial hole that receives it have a diameter substantially equal to the width of the interior cavity in the vicinity of the posterior wall.

18. (Previously presented) Implant according to Claim 14, wherein the interchangeable compression plug has a length such that, at the end of screwing it into the threaded axial hole that receives it, its interior end portion penetrates the interior cavity to a distance of at least one quarter of the length of said interior cavity.

19. (Previously presented) Implant according to Claim 14, wherein the implant has at least two interchangeable compression plugs having different lengths.

20. (Previously presented) Implant according to Claim 14, wherein the posterior wall of the implant body includes an external diametral groove for actuating axial rotation of the implant.

21. (Previously presented) Implant according to Claim 14, wherein the anterior wall includes an eccentric threaded hole of smaller diameter.

22. (Previously presented) Implant according to Claim 14, wherein the upper larger wall and the lower larger wall include annular toothed anti-expulsion ribs.

23. (Previously presented) Implant according to Claim 14, wherein the interchangeable compression plug is made of titanium.

24. (Previously presented) Implant according to Claim 14, wherein the implant body is made of a PEEK type polymer.

25. (Previously presented) Implant according to Claim 24, wherein the implant comprises a titanium marker in the implant body away from the interchangeable compression plug.

26. (Previously presented) Implant according to Claim 14, wherein the upper wall and lower wall are each of conical general shape and the upper orifice and lower orifice are each bordered at their anterior and posterior ends by a flat perpendicular to the lateral walls.

27. (New) Intervertebral implant for stabilizing adjacent vertebrae, comprising a solid biocompatible material implant body having a tubular general structure, the body having a longitudinal axis and a transverse axis, the body being delimited by an upper wall and a lower wall that are convex and slightly divergent toward the front, two opposite lateral walls that are plane and slightly divergent toward the front, and a posterior wall with a threaded axial hole, with a single interior cavity providing communication between orifices provided in the upper wall and the lower wall, wherein:

the body has a height, defined by a distance between the upper wall and the lower wall, wherein the height varies along the transverse axis,

the upper wall and the lower wall each comprise a respective single large upper orifice or lower orifice,

an interchangeable compression plug is adapted to be fitted by screwing it into the threaded axial hole in the posterior wall,

the interior cavity is closed toward the front by an anterior wall,

the width of the implant defined by the lateral walls is less than its height defined by the upper wall and the lower wall, in each cross-section taken along the longitudinal axis.